App. Serial No. 10/576,714 Docket No.: US030472US

In the Claims:

Please amend claims 1, 3, 6, 7, 10 and 14, cancel claims 2, 4, 5, 12, 13 and 15 without prejudice or disclaimer, and add new claim 16 to appear as shown in the following listing of claims, which replaces all previous versions.

- 1. (Currently Amended) A ground-signal-ground (GSG) test structure for production measurement of RF device performance in integrated circuits, comprising one pair of signal pads (S1, S2) and two pairs of ground pads (G1a, G2a; G1b, G2b), wherein all said six pads (G1a, G2a, S1, S2, G1b, G2b) are arranged linearly with first pads (G1a, S1, G1b) connected to first RF probes (11) and second pads (G2a, S2, G2b) connected to second RF probes (12), the first pads (G1a, S1, G1b) being arranged alternately with the second pads (G2a, S2, G2b).
- 2. (Cancelled).
- 3. (Currently Amended) The test structure of claim 1 [[2]], wherein all said first RF probes (11) are connected to a first port, and all said second RF probes (12) are connected to a second port.
- 4. (Cancelled).
- 5. (Cancelled).
- 6. (Currently Amended) The test structure of claim 1 [[5]], wherein a device under test (DUI) (14) is placed between said pair of signal pads (S1, S2).
- 7. (Currently Amended) The test structure of claim 6, wherein said pair of signal pads (S1, S2) are placed on an upper metal layer (13) and said two pairs of ground pads (G1a, G2a; G1b, G2b) (G1a, G1b; G2a, G2b) are placed on a lower metal layer (15).
- 8. (Original) The test structure of claim 7, wherein each of said two pairs of ground pads

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(G1a, G2a; G1b, G2b) has a common single pad opening.

- 9. (Original) The test structure of claim 8, wherein a pad pitch is 100 um and a probe pitch is 200 um.
- 10. (Currently Amended) An arrangement of GSG testing pads comprising one pair of signal pads (S1, S2) and two pairs of ground pads (G1a, G1b; G2a, G2b), wherein all of said pads (G1a, G2a, S1, S2, G1b, G2b) are arranged linearly with first pads (G1a, S1, G1b) connected to first RF probes (11) and second pads (G2a, S2, G2b) connected to second RF probes (12), the first pads (G1a, S1, G1b) being arranged alternately with the second pads (G2a, S2, G2b).
- 11. (Original) The arrangement of claim 10, wherein all of said pads (G1a, G2a, S1, S2, G1b, G2b) are placed in a saw lane of a wafer.
- 12. (Cancelled).
- 13. (Cancelled).
- 14. (Currently Amended) The arrangement of claim <u>10</u> [[13]], wherein all said first RF probes (11) are connected to a first port, and all said second RF probes (12) are connected to a second port.
- 15. (Cancelled).
- 16. (New) The arrangement of claim 10, wherein each of said two pairs of ground pads (G1a, G2a; G1b, G2b) has a common single pad opening.